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ABSTRACT

This study examined the link between alcohol use and domestic violence in the American Indian population. A total of 204 American Indian families and 2,007 non-American Indian Whites were analyzed using the 1985 National Family Violence Resurvey. The rates of family violence were first calculated by ethnicity, and then compared to a sample of non-American Indian White families. The second part of the analysis looked at spousal violence in American Indian families. The incidence rates of couple violence were estimated to be at least 15.5 per 100 American Indian couples. Acts of spousal assaults were also found to be higher in the American Indian sample compared to the White comparison group. After controlling for economic deprivation, age and urbanicity, it was found that both high rates of alcohol consumption and high rates of perceived stress significantly increased the probability of couple violence in general and the probability of husband-to-wife assaults. The statistical relationship found between alcohol consumption and violence has been documented qualitatively in other studies. A shortage of treatment programs exists along with other problems inherent in many treatment facilities on reservations and in rural areas in general. Dealing with alcoholism alone, however, does not deal with what are more likely the underlying contributors of domestic violence. Nonetheless, spousal assault is a major problem among American Indian communities, which needs further attention. (LLL)

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Alcohol, Stress, and Violence in American Indian Families [1]

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Introduction

Despite the proliferation of studies on the issue of family violence in this country, little attention has been focused on minority groups including American Indians. While some investigators have studied child maltreatment in American Indian communities (Fischler, 1985; White and Cornely, 1981) virtually none have focused attention on issues of spousal violence. The paucity of research on family violence among American Indians parallels the paucity of services. In fact, while the population in general has had access to battered women's shelters for nearly two decades (albeit limited in some communities), the few shelters that do exist for American Indian women on reservations were only opened within the last few years.

There have been studies of Canadian Aboriginal family violence. These studies have documented high rates of wife battering in Canada (Jamieson, 1987; Riddell and Doxtator, 1986), but little is known about incidence rates of spousal violence in American Indian populations. The purpose of this paper is twofold. The first purpose is to provide a national estimate of the incidence of violence among American Indian families. Using a nationally representative sample from the 1985 National Family Violence Resurvey (Straus and Gelles, 1990), of families who identify themselves as American Indian (N=204), we will present incidence rates of both couple violence in general and husband-to-wife violence. The second purpose is to explore the extent ot which violence in Amreican Indian families can be explained by alcohol abuse and stress, taking into account the many demographic

characteristics of American Indian families that may also explain the violence occurring within them.

There are limitations, however, in using this data to study American Indian families. The first has to do with the question of who is an American Indian? The definition of an Indian is subject to great diversity. Respondents who self-classified themselves as American Indian represent the sample for this study. The term "American Indian" as used in this research broadly refers to all persons of Indian, Eskimo or Aleut descent. It does not take into account the diversity of tribes. Despite the significant social, cultural and legal distinctions among tribal units in this country, there is a unifying feature among all American Indian's experiences. Since the beginning of European contact all tribes have had economic and social disruptions of their communities, of their traditional family life, and of their respective roles in community affairs. It is, however, recognized that there are limitations to a study which globally refers to American Indians and the considerable diversity present within this population should not be underestimated. Thus, the findings of this paper will undoubtedly exhibit unique variations at local tribal levels.

ALCHOL USE AND FAMILY VIOLENCE

While this paper includes several demographic variables which are considered important in predicting levels of domestic violence relationship in general, one of the central variables that will be analyzed is alcohol consumption. For this reason, it is important to discuss what is known about the alcohol-violence in general and

also what is known about alcohol use in the American Indian population. This section will begin with the latter.

Alcohol Use in American Indian Populations

The Indian Health Service believes that no other condition adversely effects so many aspects of Indian life in the United States than does alcoholism. Whittaker (1982) investigated the incidence of alcohol consumption at a midwestern reservation and found that alcohol problems affected almost the entire reservation population directly or indirectly and that approximately one of every three Indians over 15 years drank to excess. Using a comparison sample of the White population, he concluded that the incidence of alcoholism was more than double among Indians. Further, among young Indian adults (particularly males) the incidence of excessive drinking was close to 95 percent. This high incidence of alcohol consumption by American Indians has been reported by others as well (Hughes and Dodder, 1984; Kraus and Buffler, 1979; Lex, 1987).

Problems of alcohol abuse, however, do not exist in a vacuum. Alcoholism among American Indians has been found to be associated with and intensified by an array of phenomena including social disorganization, anomie and alienation (Kahn, 1982; Kraus and Buffler, 1979). Others have cited a lack of social acceptance, unemployment, and underemployment (Jarvis and Bodt, 1982; Levy and Kunitz, 1974; Frederick, 1973).

The Alcohol and Family Violence Connection

The association of alcohol with family violence has been found for the population in general by a number of investigators (Kaufman

and Straus, 1987; Van Hasselt et al., 1985; Coleman and Straus, 1983; Rosenbaum and O'Leary, 1981; Gelles, 1974). Perhaps the most sophisticated study to date has been by Kaufman Kantor and Straus (1987). Their findings revealed a strong link between alcohol use and physical abuse of wives with the strongest relationship found between binge-drinking blue-collar husbands who approve of violence.

Although there are several studies which support a link between alcohol and general violence among the American Indian population (Bachman, 1989; Kraus and Buffler, 1979) evidence supporting a link between drinking and family violence specific to American Indian populations is only descriptive in nature. After conducting fieldwork at three battered women's shelters on reservations, Bachman (1991) concluded that over 75 percent of the women she interviewed described assaults by their husbands as precipitated or escalating after the consumption of alcohol. An analysis of responses from intake questionnaires at one facility revealed that 70% of the abusers were under the influene of alcohol or drugs at the time of the assault that brought the women to the shelter. This is drastically higher than percentages found in the general population. For example, Kaufman Kantor and Straus (1990) report that only 24 percent of their nationally representative sample were under the influence of alcohol immediately prior to the spousal violence.

As alcohol use is a seemingly major problem in the American Indian population, and as preliminary investigations have found a strong link between alcohol use and domestic violence in this

population, the primary research question that the second part of this paper will address is "Do American Indian men who drink heavily have a greater probability of wife abuse than other American Indian men?"

METHODS

Sample

The sample used in this paper was based on the 1985 National Family Violence Resurvey (Straus and Gelles, 1990). American Indian and non-American Indian White cases were drawn from the national probability sample . A total of 204 American Indian families were available in the Resurvey, in addition to the 2007 non-American Indian Whites who are also analyzed here for purposes of comparison.

Violence Measures

Measures of family violence were operationally defined using the Conflict Tactics Scales (CTS)(for a detailed description of the CTS see Straus and Gelles, 1990). The CTS was designed to measure a variety of behaviors used in conflicts between family members during the previous 12 months. The CTS asks respondents to recall the times "in the past year" when they and their partner "disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason." The instructions go on to say: "I'm going to read a list of some things that you and your partner might have done when you had a dispute and would like you to tell me for each one how often you did it in the past year." The list spans many techniques including reasoning, verbal aggression and finally physical aggression or "violence."

The CTS items are often subdivided into "Minor" and "Severe" violence. The minor violence items are threw something at the other family member; pushed, grabbed, or shoved; and slapped spanked. The severe violence index measures those acts that have a relatively high probability of causing injury. The items are kicked, bit or punched; hit or tried to hit with an object; beat up; choked, threatened with a knife or gun; and used a knife or gun.

Measure of Alcohol Consumption

The Drinking Index used in this paper was developed by Kaufman and Straus (1987). The purpose of this measure is to differentiate patterns and levels of drinking. Another important aspect of the index is that it is sensitive to binge patterns of drinking, a pattern which has been documented to strongly related to levels of domestic violence (Kaufman Kantor and Straus, 1987). It combines data from two survey questions:

(1) In general, how often do you consume alcoholic beverages - that is, beer, whine or liquor? never, less than 1 day a month, 1-3 days a month, 1-2 days a week, 3-4 days a week, 5-6 days a week, daily

(2) On a day when you do drink alcoholic beverages, on the average, how many drinks do you have? By a "drink" we mean a drink with a shot of 1 1/2 ounces of hard liquor, 12 ounces of beer, or 5 ounces of wine.

The frequency and amount data from these questions were used to develop six categories of drinking:

0 - Abstinent: Never drinks
1 - Low: Drinks on infrequent occasions, ranging from less than once a month up to 1-2 times a week; never more than 1 drink at a time. Drinks less than once a month and no more than 2 drinks at a time.
2 - Low Moderate: Drinks from 1 to 3 times a month up to daily; never more than 2 drinks.
3 - Low Binge: Drinks less than once a month up to 1 to 2 times a week: 3-4 drinks a day.
4 - High: Drinks 3-4 times a week up to daily; 3 or more drinks a day

5 - Binge: Drinks on infrequent occasions - once a month up to 1 to 2 times a week; 5 or more drinks a day.

Measure of Stress

Much research has shown that although the family is often seen as a place where one can find respite from the tensions of the world, in reality, it is a group with an inherently high level of conflict and stress (for a detailed theoretical case for this view see Straus, 1990; Farrington, 1980). Stress has also been shown to be a significant predictor of family violence (Straus, 1990; Garbarino and Ebata, 1983). For these reasons, it is important to include a measure of stress in the analyses presented below.

The definition of stress used in this research treats stress as a subjective experience. Operationally, the measure used as an indicator of stress is an additive index consisting of responses to three items of a 5-point Likert Scale: (1) felt nervous or stressed; (2) felt difficulties were too great and (3) could not cope.

Demographic Controls

In addition to the measures of drinking and stress, certain demographic control measures were included in the analysis because of their association with both ethnicity and family violence. Family income was used as an indicator of economic status. This variable was measured in six intervals ranging from a low of none to ten thousand dollars to the highest of fifty thousand dollars and over. The age of the respondent was also included as a control because the literature has documented its inverse relationship with family violence.

Data Analyses

The rates of family violence were first calculated by ethnicity to provide a estimate of the incidence of spousal violence among American Indian families. These rates were then compared to a sample of non-American Indian White families.

The second part of the analysis takes a closer look at spousal violence in American Indian families. It presents a multivariate analysis of the structural determinants of violence between American Indian couples. Because responses for the measures of violence were highly skewed, the assumption of a normal distribution necessary for conducting ordinary least squares (OLS) regression could not be made. For this reason, the violence measures were treated as dichotomies. Specifically, for all measures of violence presented in this section (overall couple violence, husband-to-wife violence, wife-to-husband violence), respondents who had committed at least one acct of violence were assigned a value of 1, and those who had not were coded as 0. Coding the dependent variable in this fashion allowed logistic regression to be performed. [1]

INCIDENCE AND PREVALENCE RATES

The purpose of this section is to examine the magnitude of family violence in the American Indian population and compare this to rates of the non-American Indian White population. These rates are presented in Table 1.

Table 1 About Here

Couple Violence. The first two rows in Table 1 gives rates of couple violence. The rate of 15.5 for Any Violence for the American Indian population indicates that just over 15 percent of American Indian couples experienced an incident of physical violence during 1985. Applying this rate to the number of American Indian couples in the United States in 1985 results in an estimate of 36,940 couples who experienced at least 1 act of violence during that year. This rate is somewhat higher than that found for the comparison rate for the White population (14.8).

A substantial number of these assaults were severe as the second row indicates. Over 7 percent of these couples engaged in acts of violence which could have been potentially injurious like kicking, punching or stabbing. Specifically, out of these 36,940 couple assaults, 17,159 were severe assaults.

Husband-To-Wife Violence. The second set of rows in Table 1 presents the rate and estimated number of assaults for acts of violence that were perpetrated by the husband. It can be seen that although rates for any act of violence are higher for American Indian populations, the White population has a higher rate of severe violence (3.0 compared to 2.2).

The rate of 12.2 per 100 couples for any act of violence indicates that just over 12 percent of husbands carried out 1 or more violent acts during 1985. What is even more troubling is the rate of severe violence, while somewhat smaller than the rate for Whites, shows that more than 2 out of every hundred women were severely assaulted by their partner during the year of this study.

Extending from this, approximately 5,243 American Indian women were beaten by their partner in 1985.

Problems Of Underestimation

All of the rates in Table 1 should be regarded as "lower bound" estimates for a number of reasons. The first reason has to do with our sample of American Indians. Approximately half of American Indians live on reservations while the other half reside in urban areas. This poses several problems with generalizing this sample to the entire population of American Indians. First, Census estimates indicate that on many reservations, households which do not have telephones can be as high as 60%. Consequently, this sample probably represents American Indians who reside in urban areas more than those who reside on reservations. Moreover, reservation communities have been found to suffer greater degrees of economic deprivation (Straus, 1983; Sorkin, 1976) deaths resulting from alcoholism, and other violent death including high homicide and suicide rates (Kenen and Hammerslough, 1987; Bachman, 1991). It is therefore very probable that the estimates presented in this report are drastically lower than those that would be obtained if a representative sample of both reservation and urban American Indians were obtained.

These reasons exist along with a number of other reasons why these rates should be regarded as "lower bound" estimates. Straus, Gelles and Steinmetz (1980 p.35) outline three obstacles to obtaining accurate rates of family violence. Some may fail to report acts like slapping and pushing simply because it is a normal part

of the family and is not noteworthy or dramatic enough to be remembered. On the other hand, some may not report because of the shame involved if one is the victim or the guilt if oune is the offender. And finally, because the sample is exclusive to couples currently living together, previous marriages which may have included excessive violence (and therefore resulted in divorce) may have been missed.

DRINKING AND STRES

This section is intended to identify factors which are important in predicting spousal violence in the American Indian population.

The first step that was taken to investigate the drinking and violence connection question was to compute wife abuse rates for each of the six types of drinkers identified by the Drinking Index. These rates are presented in Figure 1 and provide strong evidence of a linear association between drinking and wife abuse. The percentage of violence husbands rises dramatically from 5.8 percent for abtainers to a high rate of 22 percetn for binge drinkers. From this, it appears that the higher and potnetially more problematic the drinking level, the higher the rate of spousal violence perpetrated the husband. It is important to note, however, that those who report abstaining from alcohol consumption do not have rates of violence equal to zero. The next step in exploring the relationship between drinking and spousal assault was to control for other important explanatory factors that might also contribute to levels of wife abuse.

Figure 1 About Here

Table 2 presents the results of logistic regression analyses for two models which predict levels of couple violence in general and also rates of husband-to-wife violence for American Indians.

Table 2 About Here

Part A of this table presents the results when estimating the probability of couple violence from all exogenous variables. The Drink Index was found to be a significant predictor of couple violence (p=.005). As the frequency and intensity of drinking increased, so to did incidents of violence within this sample of American Indians. Stress also had a significant relationship with couple violence (p=.001). As perceived levels of stress went up, so did the probability of violence between partners. The only other significant predictor in this model was age (p=.037). As age increased, the probability of couple violence decreased. This inverse relationship between age and violence and been extensively documented in the literature (Suitor, Pillemer and Straus, 1990).

Part B of Table 2 presents results of the husband-to-wife violence analysis. Again, stress is a significant predictor of acts of violence perpetrated by the husband (p=.0001), as is the drink index (p=.05). The demographic control of age is also significant (p=.037). So, similar to couple violence in general, as both levels

of stress and drinking increase, so does the probability of husband-to-wife violence.

The results found here for American Indians are consistent with other studies of the relatiosnhio between stress, alcohol and family violence (Kaufman and Straus, 1987). That is, assaults between partners are more likely the occur when there is also a tendency to consume large quantities of alcohol. This relationshiop is true of stress as well. As levels of perceived stress increase, so does the probability of family violence.

What is perplexing, however, is that no significant relationship was found between income and American Indian spousal violence. It should be noted that a preliminary analysis (not reported here) with Chi-Square revealed a significant relationship with both the income measure included in these models and also with a dichotomous variable of blue collar and white collar status. That is, as income increased, the probability of spousal violence decreased. Levels of spousal violence were also significantly higher for blue collar workers than for white collar workers. When simultaneously controlling for these other variables like alcohol use, however, measures of economic standing drop out.

SUMMARY AND CONCLUSIONS

Using a nationally representative sample of American Indians (204) and a comparison sample of non-American Indian Whites (2007), the first part of this paper estimated the incidence rates of couple violence to be at least 15.5 per 100 American Indian couples. Acts of spousal assaults were also found to be higher in the American

Indian sample compared to the White comparison group. These rates suggest that over 36,940 American Indian couples experience violence every year, and 17,159 of those are severe enough to be potentially injurious. Assaults perpetrated by the husband were estimated to effect 29,075 American Indian women with 5,243 of those categorized as "wife beating." Because of sample limitations and because of the virtual certainty that not every respondent was completely frank in describing violent incidents, these numbers should be regarded as underestimates. These are alarming numbers considering that they are estimated for a population that comprises only about 1.4 million people.

The second part of this paper explored the etiology of violence in American Indian families. After controlling for economic deprivation, age and urbanicity, it was found that both high rates of alcohol consumption and high rates of perceived stress significantly increase the probability of couple violence in general and the probability of husband-to-wife assaults.

The statistical relationship found between alcohol consumption and violence has also been documented qualitatively. In the qualitative study performed by Bachman on three reservations (1991), the typical scenerio of wife-beating involved the husband going out with his friends and drinking too much after which he would make faulty assumptions and go into a jealous rage which culminated into a assault on his partner.

While the evidence just presented indicates that there is a strong linkage between alcohol consumption, stress and violence in American Indian families, the number of cases for analysis is

important to consider. This analysis is based on a relatively small number of American Indian families (N=204) and an even smaller number of these families exhibiting spousal violence. This fact, in addition to the sample problems outlined above, should compel a reader to take caution when generalizing these sample results to the population of American Indian families in general and the conclusions should be regarded as tentative.

Keeping the limiations in mind, several policy implications emerge from this analysis. First, more creative and resourceful programs need to be implemented which combat alcoholism within the American Indian population. As there is some degree of conflict between the traditional ways of treating alcoholism (i.e. sweatbaths and other religious ceremonies) and the ways of contemporary society (i.e. Alcoholics Anonymous), a challenge exists for our society to incorporate both dominant and culturally sensitive orientations into treatment facilities.

As one battered woman stated, "My whole family is in an alcoholic situation, my parents, my husband, my children. We all need help. Everyone here needs help but you need to wait forever just to get into treatment." This problem was confirmed by several counselors who worked at the shelter. "There are many people who would like to get treatment, thre is a long waiting list. So instead of doing intervention when someone has hit rock bottom, a lot of times you have got to be sober for months before they can get into tratment. This obviously rules out alot of people. They try to treat the people who might make it the best instead of those who need the most. People who have money can get into treatment programs when

they hit rock bottom. But no one has money here. Here it is not like that. It's like, you tget your act together enough to go then we'll think about sending you, we will get you on a waiting list. " (Bachman 1991, chapter 7)

This shortage of treatment programs exists along with other problems inherent in many treatment facilities on reservations and in rural areas in general. Many are staffed by counselors who have no formal education other than being a recovering alcoholic themselves. As one counselor at the shelter said, "The quality in follow-up is not good if it exists at all and the turnover in counselors in increadible. They themselves are usually in and out of treatment. It takes time to get through the trauma of recovering yourself and sometimes they put them right into counseling positions right out of treatment.

Dealing with alcoholism alone, however, does not deal with what are more likely the underlying contributors of domestic violence. As one counselor stated, "The alcohol problem is, of course, everpresent but it is not clear if it is the caue of family violence or the rsult of other things." Many American Indians are who choose to live on reservations are given very little economic opportunities. Work is often seasonal, if present at all which leads to very high unemployment rates on many reservations. Further, as a result of teh ccolonization process, the American Indian people in this country an erosion of life - complete with various forms of political, social and economic dislocation. This has undoubtedly produced unique pressures on the relationships between American Indian family members.

Of eminent importance, however, is a need for the recognition that spousal assault is a major problem among American Indian communities. Communities need to implement educational programs to focus attention on the issue. In the immediate sense, more funding is required to meet the needs of abused American Indian women and their children as their safety is undoubtedly at stake.

To reiterate, results from this analysis should be regarded as tentative. Future research should focus on exploring domestic violence within more homogeneous units like specific tribal and reservation communities. Urban and rural differences also need to be considered. American Indian intrafamily violence is a complex and multi-faceted issue. There are so many gaps in our understanding of how contemporary American Indian family formations actually function that this paper raises more questions than it actually answers. It is hoped that it will be a catalyst for future work in this area.

ENDNOTES

1. The logistic regression method applies a nonlinear transformation so that the dependent variable is no longer the dichotomous occurrence of Y. The equation estimates are based on the logarithm of the ratio between the probability Y-1 and the probability Y-/-1 (Aldrich and Nelson, 1984: 31-33).

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Table 1. Annual Inccidence Rate of Violence in American Indian and Non-American Indian White Families and Estimated Number of American Indian Cases Based on These Rates.

Type of Intra-Family Violence	Rate per 100 Couples: White	Rate per 100 Couples: American Indian	Estimated Number of American Indians Assaulted Per Year*
ANY violence during the yr. (slap, push, etc.)	14.8	15.5	36,940
SEVERE violence (kick, punch, stab, etc.)	5.3	7.2	17,159
ANY violence by the HUSBAND	11.0	12.2	29,075
SEVERE violence by the HUSBAND ("wife beating")**	3.0	2.2	5,243

* The column giving the "Number Assaulted" was computed by multiplying the rates in this table by the 1980 Census Burreau estimate of the American Indian population.

** Because of the greater average size and strength of men, the acts in the Severe Violence list are likely to be more damaging when the assailant is the husband. To facilitate focusing on the rate of severe violence by husbands, the term "wife beating" has often been used to refer to that rate (Straus and Gelles, 1990)

Table 2. Logistic Regression results of Family Violence by Demographic Measures.

Demographic Variable	Regression Coefficient	Standard Error	t	Level of Significance
A. Couple Violence				
Age of respondent	-.079	.030	-2.587	.011
Urbanicity	.165	.348	.475	.635
Family annual income	.173	.097	1.77	.078
Drink Index	.547	.192	2.84	.005
Stress	.266	.192	3.28	.001
Constant	-4.01	1.905	-2.109	.036
N of Cases = 167, chi-square = 37.89, $p < .0001$				
B. Husband-to-Wife Any Violence				
Age of respondent	-.064	.030	-2.109	.037
Urbanicity	.006	.363	.018	.986
Family annual income	.054	.102	.528	.598
Drink Index	.352	.195	1.995	.051
Stress	.303	.083	3.64	.001
Constant	-1.866	1.503	-1.241	.216
N of Cases = 167, chi-square = 10.41, $p < .034$				

Figure 1. Husband-To-Wife Violence Rate
As A Function of Drinking Type